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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,602	03/15/2004	Jason Hsiao	P08205US00/MP	8259

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EXAMINER

RIVELL, JOHN A

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/799,602	HSIAO, JASON	
	Examiner	Art Unit	
	John Rivell	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/15/04 (application).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03152004</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim 1 is the only claim pending.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsiao (U.S. Pat. No. 6,155,285) in view Hsiao (6,405,751) of Powers.

The patent to Hsiao ('285) discloses, in figure 2 for example, a "gas safety valve comprising a main body (1), a meltable element (6)..., and an engaging member (coupling 5) for engaging the main body to a coupler of a gas source (at 7, see figs. 3-5), the main body (1) comprising a longitudinal through-hole including a first section (12), a second section (11), and a third section (10), inner diameters of the first section, the second section, and the third section being different from one another, a ball (3) and a restraining member (4) being mounted in the first section (12), the ball (3) having a diameter greater than the inner diameter of the second section (11), thereby restraining the ball (3) and the restraining member (4) in the first section (12), a spring (2) being mounted in the second section (11) and having a length greater than that of the second section, with an end of the spring (2) protruding out of the second section (11 into the first section 2) for biasing the ball (3) away from the second section (11)" as recited in claim 1.

Thus the patent to Hsiao ('285) discloses all the claimed features with the exception of having "and an O-ring being mounted around the main body" and a spring adjustment arrangement wherein "an outer sleeve (is) force-fitted in the third section of

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the main body, the outer sleeve including an inner threading, a hollow adjusting block being mounted in the outer sleeve and having an outer threading for threadedly engaging with the inner threading of the outer sleeve, the spring having another end abutting against the adjusting block; wherein adjustment of a position of the hollow adjusting block in the outer sleeve changes a distance between the ball and the second section".

Firstly, the patent to Hsiao ('751) discloses that it is known in the art to employ "an O-ring (shown at the left end of main body 1, about the external surface of body 1, just above the end of the lead line for reference numeral 10) mounted around the main body" 1 in abutment with the left end of the coupling connection 4 for the purpose of restraining the main body 1 in the axial direction with respect to the coupling nut 4 while at the same time permitting the main body 1 to rotate relative to the coupling nut 4 permitting connection of the coupling nut 4 to any other coupling half connected thereto without rotating the main body 1.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Hsiao ('285) an "O-ring" mounted around the left half of the main body 1 in abutment with the left end of the coupling connection 5 for the purpose of restraining the main body 1 in the axial direction with respect to the coupling nut 5 while at the same time permitting the main body 1 to rotate relative to the coupling nut 5 permitting connection of the coupling nut 5 to any other coupling half connected thereto without rotating the main body 1 as recognized by Hsiao ('751).

Secondly, the patent to Powers discloses that it is known in the art to employ a spring adjustment mechanism operative on a spring biased open ball check valve in which an "an outer sleeve (20 is threaded at 22 and connected in a) third (outlet) section of (a) main body (9), the outer sleeve (20) including an inner threading (25), a hollow adjusting block (30) being mounted in the outer sleeve (20) and having an outer threading (35) for threadedly engaging with the inner threading (25) of the outer sleeve (20), (a) spring (42) having (an) end abutting against the adjusting block (30); wherein adjustment of a position of the hollow adjusting block (30) in the outer sleeve (20) changes a distance between (a) ball (40)" and the valve seat 27 for the purpose of adjusting the sensitivity, in both a coarse via the position of outer sleeve 30 and fine via the position of the adjusting "block" 30, of the ball to the flow rate of fluid and thereby adjust the operating characteristics of the biased open ball check valve.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Hsiao ('285) an outer sleeve ... in the third section (10) of the main body (1), the outer sleeve including an inner threading, a hollow adjusting block being mounted in the outer sleeve and having an outer threading for threadedly engaging with the inner threading of the outer sleeve, the spring (2) having another end abutting against the adjusting block; wherein adjustment of a position of the hollow adjusting block in the outer sleeve changes a distance between the ball and the second section" for the purpose of adjusting the sensitivity, in both a coarse via the position of outer sleeve 30 and fine via the position of the adjusting "block" 30, of the ball to the flow rate of fluid and thereby adjust the operating characteristics of the biased

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open ball check valve as recognized by Powers. The recitation of "force fitted" concerning the attachment of the outer sleeve within the body is considered to be a full mechanical and/or functional equivalent of the threaded connection taught by Powers.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Rivell
Primary Examiner
Art Unit 3753

j.r.